

**Rate Schedule DSW-FR4
SCHEDULE 3 to OATT
(Supersedes Schedule DSW-FR3)**

**UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION**

**Desert Southwest Region and
Western Area Lower Colorado Balancing Authority**

REGULATION AND FREQUENCY RESPONSE SERVICE

Effective

The first day of the first full billing period beginning on or after October 1, 2016, and will remain in effect through September 30, 2021, or until superseded.

Applicable

Regulation and Frequency Response Service (Regulation Service) is necessary to provide for the continuous balancing of resources, generation and interchange, with load, and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz). The obligation to maintain this balance between resources and load lies with the Transmission Service Provider (TSP) or the Balancing Authority (BA) who performs this function for the TSP. The Western Area Lower Colorado Balancing Authority (WALC) performs this function for the Federal TSPs and must offer this service when transmission is used to serve load within its Balancing Authority Area (BA Area). Non-Federal TSPs and customers of Federal TSPs must purchase Regulation Service from WALC or make alternative comparable arrangements to satisfy their regulation obligations.

Formula Rate

$$\text{Regulation Service Rate} = \frac{\text{Annual Revenue Requirement for Regulation Service}}{\text{Load within WALC Requiring Regulation} + (\text{Installed Nameplate Capacity of Solar Generators Serving Load within WALC} \times \text{Solar Capacity Multiplier}) + (\text{Installed Nameplate Capacity of Wind Generators Serving Load within WALC} \times \text{Wind Capacity Multiplier})}$$

The numerator includes the annual costs associated with plant-in-service, operation and maintenance, purchase of regulation products, purchases of power to support WALC's ability to regulate, and other related costs involved in providing the service. The denominator consists of the load within WALC that requires this service plus the product of the installed nameplate capacity of solar and wind generators serving load within WALC and the applicable capacity multipliers.

Based on the formula rate, the charge will be calculated each fiscal year using updated financial and load data. The charge will be effective on October 1st of each year and will be posted on WALC's website.

Types of Assessments

There are two different applications of this formula rate:

- 1) A load-based assessment which is applicable to load within WALC (total metered load less Federal power allocation, including behind the meter generation rating, or if available, hourly data if generation is synchronized) and the installed nameplate capacity of all intermittent resources serving load within WALC.
- 2) A self-provision assessment which allows entities with Automatic Generation Control (AGC) to self-provide for all or a portion of their loads. Entities with AGC are known as Sub-Balancing Authorities (SBA) and must meet all of the following criteria: (a) have a

well-defined boundary, with WALC-approved revenue-quality metering, accurate as defined by the North American Electric Reliability Corporation (NERC), to include Megawatt (MW) flow data availability at 6-second or smaller intervals; (b) have AGC responsive unit(s); (c) demonstrate Regulation Service capability; and (d) execute a contract with WALC, provide all requested data, and meet the SBA error criteria below.

Self-provision is measured by use of the entity's 1-minute average Area Control Error (ACE) to determine the amount of self-provision. The ACE is used to calculate the Regulation Service charges every hour as follows:

- 1) If the entity's 1-minute average ACE for the hour is less than or equal to 0.5 percent of its hourly average load, no charge is assessed for that hour.
- 2) If the entity's 1-minute average ACE for the hour is greater than or equal to 1.5 percent of the entity's hourly average load, WALC assess charges using the hourly load-based assessment applied to the entity's peak load for that month.
- 3) If the entity's 1-minute average ACE for the hour is greater than 0.5 percent but less than 1.5 percent of its hourly average load, WALC assesses charges based on linear interpolation of no charge and full charge, using the hourly load-based assessment applied to the entity's peak load for that month.

WALC monitors the entity's self-provision on a regular basis. If WALC determines that the entity has not been attempting to self-regulate, WALC will, upon notification, employ the load-based assessment methodology described above.

Alternative Arrangements

Exporting Intermittent Resource Requirement: An entity that exports the output from an intermittent generator to another BA Area will be required to dynamically meter or dynamically schedule that resource out of WALC to another BA unless arrangements, satisfactory to WALC, are made for that entity to acquire this service from a third-party or self-supply (as outlined below). An intermittent generator is one whose output is volatile and variable due to factors beyond direct operational control and, therefore, is not dispatchable.

Self- or Third-party Supply: WALC may allow an entity to supply some or all of its required regulation, or contract with a third party. This entity must have revenue quality metering at every load and generation point, with accuracy as defined by NERC, to include MW flow data availability at 6-second (or smaller) intervals. WALC will evaluate the entity's metering, telecommunications and regulating resource, as well as the required level of regulation, to determine whether the entity qualifies to self-supply under this provision. If approved, the entity is required to enter into a separate agreement with WALC which will specify the terms of self-supply.

Customer Accommodation

For entities unwilling to take Regulation Service, self-provide as described above, or obtain the service from a third party, WALC will assist the entity in dynamically metering its loads/resources to another BA. Until such time meter configuration is accomplished, the entity will be responsible for charges assessed under this schedule.